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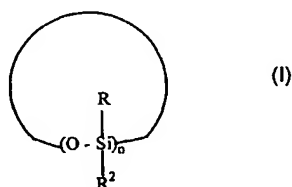
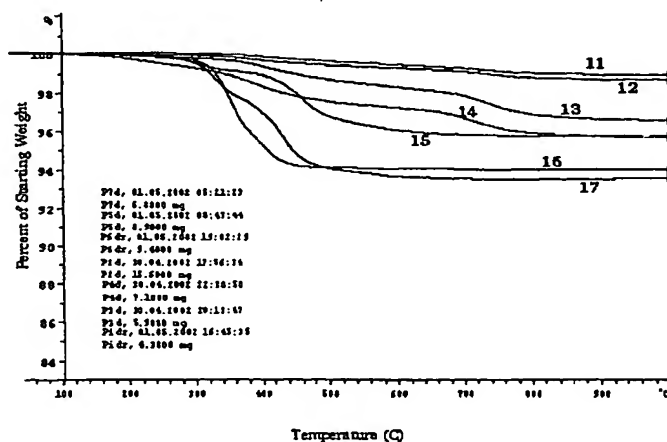
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(54) Title: POLY(CYCLOSILOXANE) COMPOSITON AND METHOD OF SYNTHESIS THEREOF



(57) Abstract: A poly(cyclosiloxane) network comprises the hydrosilation reaction product of a cyclosiloxane of the formula (I) wherein R and R² are the same or different for each siloxane moiety and are selected from the group consisting of hydrogen, an alkyl group, an aryl group, and a cycloalkyl group, and wherein n is an integer from 3 to 8, wherein the cyclosiloxanes are joined by moieties selected from the group consisting of oxygen atoms, linear silanols, branched silanols, halosilanes, alkoxy silanes, vinyl silanes, allyl silanes, vinyl siloxanes, and allyl siloxanes, wherein the Si-O bonds of the cyclosiloxanes are substantially unrearranged compared to the cyclosiloxane precursors of the network. A process for the preparation of a poly(cyclosiloxane) network comprises providing a cyclosiloxane; providing a crosslinking group selected from the group consisting of linear silanols, branched silanols, halosilanes, alkoxy silanes, vinyl silanes, allyl silanes, vinyl siloxanes, and allyl siloxanes; contacting the cyclosiloxane and crosslinking group under condensation reaction conditions such that the crosslinking groups provide Si-O-Si linkages between the cyclosiloxane moieties to form a poly(cyclosiloxane) network composition.